



SWACCH BHARAT SUMMER INTERNSHIP 2020



MINISTRY OF HUMAN RESOURCE DEVELOPMENT IN ASSOCIATION WITH THE MINISTRY OF
DRINKING WATER AND SANITATION



INTERNSHIP REPORT SUBMITTED BY

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Department of Physics

Goa University

2020-2021

UNDER THE GUIDANCE OF

DR. RAJESHKUMAR SHANKAR HYAM

DEPARTMENT OF PHYSICAL AND APPLIED SCIENCES
GOA UNIVERSITY

Declaration

I / We have carried out the SBSI 2020 Internship under the guidance of –

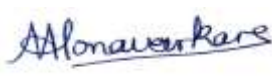

DR. RAJESHKUMAR SHANKAR HYAM

DEPARTMENT OF PHYSICAL AND APPLIED SCIENCES

GOA UNIVERSITY

The contents of this report are original and are reporting the 100 hours of work carried out by me / us during this internship.

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CERTIFICATE



This report is being submitted to SBSI 2020 University Nodal Officer, in partial fulfillment for the completion of the SBSI course during the academic year 2020-2021

Dr. Rajeshkumar Shankar Hyam

(SBSI- Mentor)

Sign:

ACKNOWLEDGEMENTS

At the outset, we would like to thank head our Physics Department Sudhir Cherkulapurath for their administrative support and encouragement. We can never forget God, our parents and families who have supported us, both, through this internship and all throughout our life.

We appreciate our SBSI Mentor Dr. RajeshKumar Shankar Hyam for their encouragement and guidance during the course of our internship. We are also obliged to the faculty and non-teaching staff of the Department of Physics(Physical and Applied Sciences), Goa University for their indulgence and co-operation in the execution of our internship.

Last but not the least I wish to place my heart full gratitude to almighty God for the completion of our internship successfully.

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1.INTRODUCTION

In a bid to promote the objectives of the Swachh Bharat Abhiyaan launched on October 2, 2014, the central government has launched the Swachh Bharat Summer Internship- 2018 aiming at enrolling students for promoting cleanliness in villages. Under this, the students are invited to select a village of their choice, and work in the village community for building a lasting system for improving the overall sanitation and hygiene in the village. It is expected that each student would devote at least 100 hours to swachhata, and carry out specific measures for improving the sanitation and hygiene in the village.

This internship is being jointly launched by the Ministry of Human Resource Development in association with the Ministry of Drinking Water and Sanitation and is named 'Swachh Bharat Summer Internship – 100 Hours of Swachhata'. The objective is to engage youths across the country, develop their skills and orientation for sanitation related work and make Swachh Bharat Mission a 'Jan Andolan'. The students enrolled in the internship are expected to adopt one or more villages and conduct activities of their choice to contribute to the cause of rural sanitation in India.

Following the Prime Minister's clarion call on 2nd October 2014 for each individual to devote at least 100 hours to Swachhata through the year, the Ministry of Human Resource Development in association with the Ministry of Drinking Water and Sanitation has launched the 'Swachh Bharat Summer Internship – 100 Hours of Swachhata'.

The program aims to:

- Develop the skill and orientation of youth for sanitation related work
- Bring youth across the country an opportunity to make a significant contribution to the swachhata revolution
- Integrate youth in the community service in rural areas in the run up to the 150th birth anniversary of Mahatma Gandhi

1.1. Why Swachh Bharat Summer Internship?

We wanted to make an impact regarding spreading awareness amongst people about cleanliness and self hygiene through field work, online surveys and competitions specially towards younger generations.

1.2. SWACHHATA PLEDGE.

- I take this pledge that I will remain committed towards cleanliness and devote time for this. I will devote 100 hours per year, that is two hours per week, to voluntarily work for cleanliness.
- I will neither litter nor let others litter. I will initiate the quest for cleanliness with myself, my family, my locality, my village and my work place.
- I believe that the countries of the world that appear clean are so because their citizens don't indulge in littering nor do they allow it to happen. With this firm belief, I will propagate the message of Swachh Bharat Mission in villages and towns.
- I will encourage 100 other persons to take this pledge which I am taking today. I will endeavour to make them devote their 100 hours for cleanliness.
- I am confident that every step I take towards cleanliness will help in making my country clean.

The students of the Department of Physics, Goa University along with proper guidance from our SBSI mentor, Dr. Rajeshkumar Shankar Hyam , have completed the 100 hours of service towards making India a clean

country, thereby putting into action the motto, “Cleanliness is next to Godliness” The students have whole heartedly completed the internship complete dedication and zeal. There have been many hurdles along the way, but we can proudly say that we gave it our all in making the beautiful village of Usgao even more beautiful by clearing out this modern menace of garbage. We have carried out various Waste Collection Drives, activities awareness programs, competitions awareness rallies, house to house surveys and much more, all of which have been continuously monitored by our panel and has been presented in the report below.

1.3. SWACHHATA ACTIVITIES AT A GLANCE.

| SR. NO. | SWACCHATA ACTIVITIES | TIME SPENT (IN HRS) |
|----------------|---------------------------------------|--------------------------------|
| 1. | PANCHAYAT MEETING | 5 |
| 2. | WASTE COLLECTION DRIVE | 45 |
| 3. | ART COMPETITION | 25 |
| 4. | SURVEY REPORT | 18 |
| 5. | RECYCLING | 2 |
| 6. | PLANTATION | 5-6 |

1.4. Aim and impact of our project .

Our team wanted to spread awareness in rural areas and educate them about importance of cleanliness and self hygiene.

If we want to change the world we have to start by ourselves first so we started spreading awareness and cleaning from our homes and then towards village of Usgao.

When we started our work most people did not give much thought about it but when they realized we were just some students cleaning the garbage they created and told them not to throw plastic and paper on the road we actually saw some impact on the locality.

We introduced our idea to village panchayat about spreading awareness about Swachhata on a larger scale in the village and they conducted a session on “A step towards cleanliness” to educate the people about importance of cleanliness and self hygiene.

1.5. Theme of our project.

The aim of our project was to keep our surroundings clean and spread awareness about keeping it clean so we selected the theme accordingly to maximize the impact.

Cleaning surroundings and recycling waste was the major factor of our field work.

We also tried to make a small impact by including plantation and greenery in our project theme which we intend to continue throughout our lives.

We joined this internship through Goa University in the second semester. My team worked with the Usgao village community to contribute towards Swachh Bharat Mission.

1.6. Usgao Village At A Glance.

Usgao is a village in Ponda taluka of south Goa district. This village was found to have an area of around 25.5 square kilometers with around 2867 households (according to census done in 2011). It's a small village but has developed a lot on the past 4-5 years yet its quite nature friendly.

This village connects to other parts of the taluka like Ponda ,Dharbandora, Valpoi. Usgao census town has total administration over 2867 houses to which it supplies basic amenities like water and sewerage. It is also authorized to build roads within the Census Town limits and impose taxes on properties coming under its jurisdiction.

Population of Children with age group 0-6 is 1254 which is 10.08 % of total population of Usgao. In Usgao Census Town , Female Sex Ratio is of 952 against state average of 973. More over Child Sex Ratio in Usgao is around 1042 compared to Goa state average of 942 . Literacy rate of Usgao is around 87.13 % lower than state average of 88.70 % . In Usgao male literacy is around 91.92 % while female literacy is 82.05%.

1.6.1. Scope And Importance.

Usgao village is a small rural area in Ponda Taluka of Goa. Its better to implement and extend the 'All India Swacchata Campaign' from the grass root level of rural area to the upper levels. Lack of proper knowledge is the major problem of the village people to be aware about the importance of Swachhata in Today's India. If proper hygiene and sanitation will not become a practice in our country then no one will be able to save our country from the health hazards and losses that will loom over the Indian populace in the near future.

2. DESCRIPTION OF VARIOUS SWACCHATA ACTIVITIES.

2.1. Planning and Mapping.

- The application forms for the internship were submitted to the Sarpanch of the Usgao Panchayat with authorization from the SBSI mentor and the Nodal Officer.
- A meeting was held along with the Sarpanch and the SBSI team to discuss the proposed plan and goal for the internship.
- Required equipment to help us in the Waste Collection Drives and segregation were purchased with support and cooperation from the Usgao Panchayat.
- A quick analyzation was made regarding the important places and sites throughout the village and photographs were clicked so as to improve conditions within these spots.

Date: 6/04/2021

Time taken: 5 hours



2.2. Meeting at panchayat.

Our SBSI group members went to the Usgao Panchayat and met with the people there including Sarpanch and most other committee members regarding the importance of Swachhata and about awareness amongst the people of Usgao area regarding self hygiene and cleanliness . We told them the aim of this Swachh Bharat Internship and explained in brief what our work plan was. A meeting was held regarding the discussion of the field work and awareness in various areas.

Our group visited various areas in the regions of the village along with a member of the panchayat office who then provided any information we needed about the area.

We discussed various equipments and supplies for the field work which was mostly provided by the Panchayat.

2.3. Cleanliness Drive.

Collection of waste along the stretch, and proper segregation into bio-degradable and non-bio-degradable.

The challenges faced by us was in disposal of the waste which constituted of a lot of cloth materials toiled in cemented mud.

Time taken: 10-11 hours

Date: 7/04/2021



Cleanliness survey is an annual survey of cleanliness , hygiene and sanitation in village and cities.

Cleanliness means that there is no dirt, no dust, no stains, no bad smells. The goals of cleanliness are health, beauty, absence of offensive odour and to avoid the spreading of dirt and contaminants to oneself and others. **Cleanliness** gives rise to a good character by keeping body, mind, and soul clean and peaceful. Maintaining **cleanliness** is the essential part of healthy living because it is the **cleanliness** only which helps to improve our personality by keeping clean externally and internally. It is everybody's responsibility and one should keep themselves and their surroundings clean and hygienic. It also brings good and positive thoughts in the mind which slows down the occurrence of diseases.

Sanitation and neatness play an important role in our day to day routine. It is important as it prevents dangerous diseases like Dengue, typhoid, hepatitis, and other diseases caused by mosquito bite, etc. Diseases like Jaundice, Cholera, Ascariasis, Leptospirosis, Ringworm, Scabies, Schistosomiasis, Trachoma, etc can be spread due to eating contaminated food, drinking contaminated water or living in an unhygienic condition. Trash also

spread bad odour which is difficult to tolerate. There will also be an accumulation of trash and dirt if clean measures aren't taken.





Location: Usgao Ganjem
,Ponda Goa (near
panchayat area)
Date: 8/04/2021

Activity: Collection of garbage that was dumped near the trio junction and left unattended. The waste was segregated into dry and wet and into bio-degradable and non-bio-degradable. The entire set was cleaned and the waste was disposed in the Garbage Dustbins within the garbage trucks nearby. A challenge faced by us was having to venture in the marshy areas with shrubs and tall grass

Time taken : 11-12 hours

Date: 16/04/2021



BEFORE



AFTER

Date: 17/04/2021

Location :- Usgao circle, Panchayat Campus.





2.4. Recycling of Waste.

Recycling is the process of converting waste materials into new materials and objects. The recovery of energy from waste materials is often included in this concept.

Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse, and Recycle" waste hierarchy

One of the main problems in urban environments is the accumulation of waste. A large percentage of waste can be recycled, preventing it from being deposited at landfills or uncontrolled sites, contributing to air, soil and water pollution. Although today's systems collect and separate different types of waste, a large part of waste is not disposed at recycling centers. In order to increase the amount of waste that is recycled, it is necessary to motivate our society to become involved in recycling activities. For this reason, this paper proposes a system that encourages citizen participation by obtaining reductions in the waste rate applied by their local government, so that the amount of waste collected to be recycled is increased. This system employs a virtual organization of agents that obtains and manages the knowledge of each city and that through gamification techniques produces a change in the habits of citizens, motivating and increasing citizen participation in recycling regardless of the urban environment in which it is implemented. A case study was carried out in order to evaluate the performance of the proposed system, the results show that citizen participation. In proper waste management techniques like incineration, microwaving, deep burial, secure land filling, inertisation, immobilization and the Reduce, Reuse And Recycle. Waste management reduces the effect of toxic wastes on the environment and human health.

As we can see the most of our work is based on hygiene and sanitation, we have cleaned many areas in usgao under the guidance of usgao panchayat. while doing so we had collected a good quantity of waste which includes papers, cardboards, cans, plastic bottles, glass and specially a lot of plastic bags. Which were later placed in separate bags. we have also done the proper management of this work by handling it to the recycling storage of usgao panchayat for recycling. This waste was stored in recycling storage for few days and is was



recycled within the period of a month. Here one of our project member was called.



2.5. Online Drawing Competition.

Date: 8/05/2021

Online mode

Time taken : 25 hours

As a part of our awareness program we organised drawing competition on Swachha Bharat Abhiyan for kids of grade 1st to 7th. Due to pandemic it was not possible to take competition physically. So we took online mode to organize the competition. We gave them 4-5 days to complete their drawings . We got a really good response from them .They thanked us for creating awareness within them. The main moto behind organizing the competition for kids was ,they adopt themselves their brains into curiosity , try to understand things and also make others to follow



2.6. Online Survey .

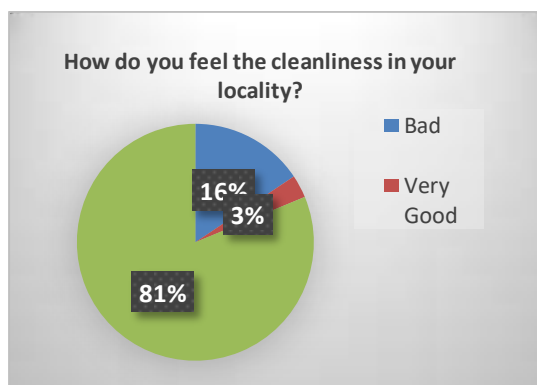
Time Taken :- 18 hours

A survey was conducted on different topics related to health and environment. The purpose of conducting the survey was to spread awareness in the locality and to change the individuals thinking towards our surroundings.

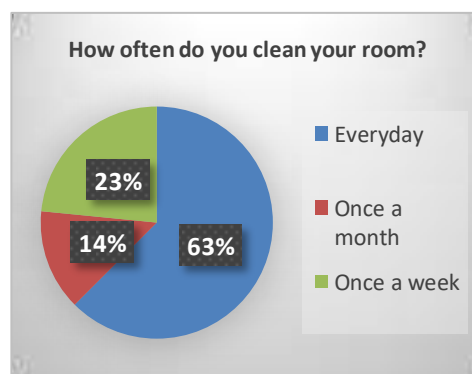
Questions were asked through google platform i.e., google form and the replies to the survey are shown in the charts below.

In first part, questions were asked on sanitation and hygiene, which is the most important factor to a healthy life. Sanitation is the creation of a clean and hygienic environment and making it sustainable.

Question wise charts are shown below: In the first pie-chart question on cleanliness in the locality was asked and 81% of the population were feeling good towards their respective panchayats/municipalities few people thought their locality was very clean and they are trying to keep their surroundings clean.



1

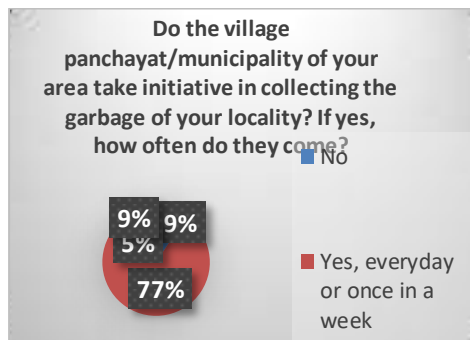


2

In the second chart as can be seen, more than half of the population clean their room everyday. Only few people clean their room once a month and ¼ of the population clean their room once a week.

In the third chart, Village panchayats/municipality have taken the initiative towards collecting the garbage in their locality more than half of the population says that from their locality garbage has been collected everyday or once in a week, only few local bodies collect their garbage once in 3 months or 5 months

and a very less population said that their ward has not taken any initiative towards waste management.



3

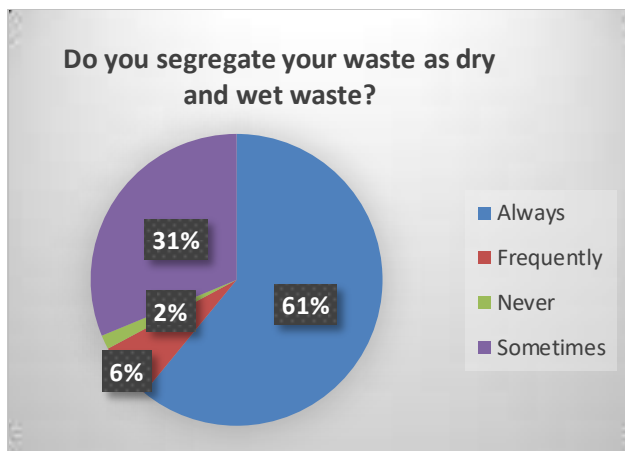


4

From the fourth chart, More than Half of the population surveyed dump their waste in the trash box or dustbins. Whereas 17% of the population burn their household waste in their backyard.

In the fifth chart, Segregation of dry (solid waste) and wet (liquid waste) program has been launched in different parts of the state. More than ½ of the population always segregate their waste. only 2% of the population does not segregate. From the sixth chart, Almost 97% of the population wash their hands after using toilet and only a few were unhygienic who do not wash their

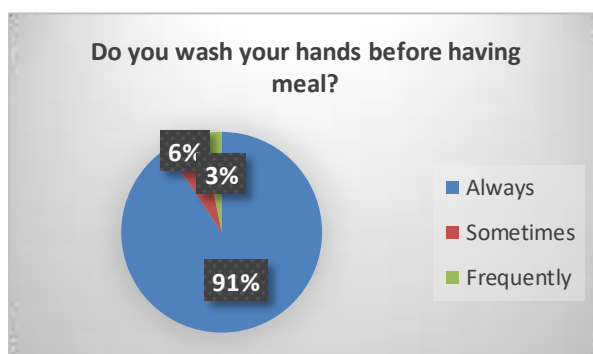
hands after using toilet. In the seventh chart, more than half of the population wash their hands before meal whereas only few people does not wash their hands regularly.



5



6

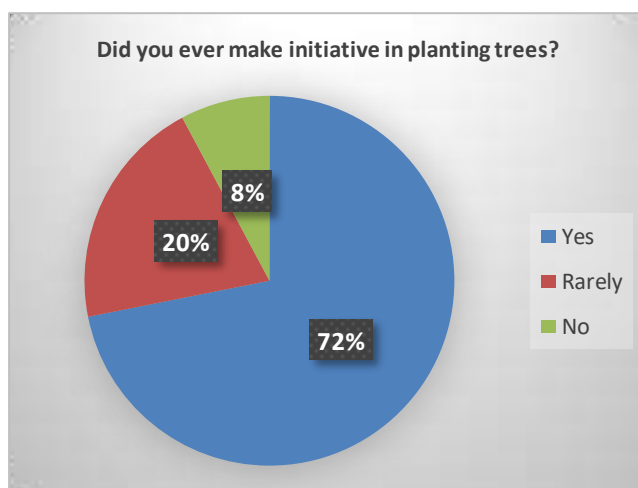


7

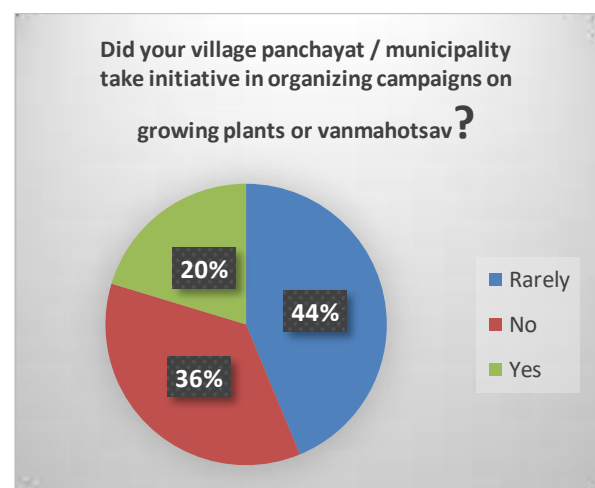
PART 2: Greenery

In the first chart(a), the initiative towards planting trees were introduced. More than half of the population regularly and happily planting trees whereas one-fourth of the population not regularly but whenever they get time from their work-scheduled plants a tree. Only few people has not taken any step for making our planet again pollutant free and in planting.

In the second chart(b),every village panchayat/municipalities organizes camp on the occasion of world environmental day or anytime to keep our planet green. Almost equal to $\frac{1}{2}$ of the population or local bodies rarely participated or has taken the initiative towards planting trees or in organizing campaign. Very less amount of people always give their valuable time while such programs was introduced in respective municipalities/panchayats, to keep surrounding clean and to get large amount of natural gases from the environment was the main moto of the campaign. More than $\frac{1}{4}$ th of the quadrant local bodies has not organized such type of campaign in their ward.



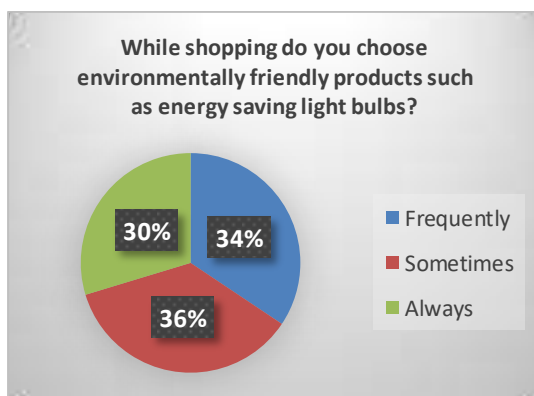
a



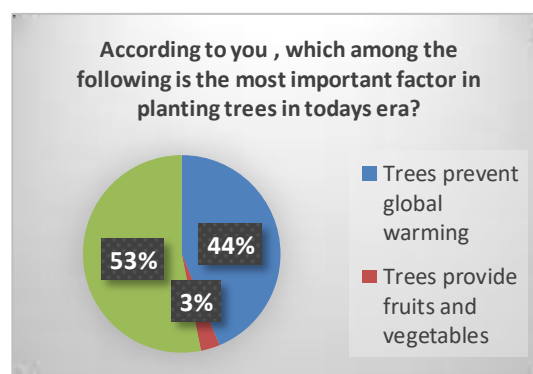
b

In the third chart(c),the most important factor or why planting trees is need of todays era was asked. Trees which provides us loads of daily basic needs in the form of fruits and vegetables from these we only get energy , but most important factor is trees provides us oxygen after the process of photosynthesis which is needed for human being

to survive whereas planting trees also controls the global temperature , which is increased due to deforestation



c

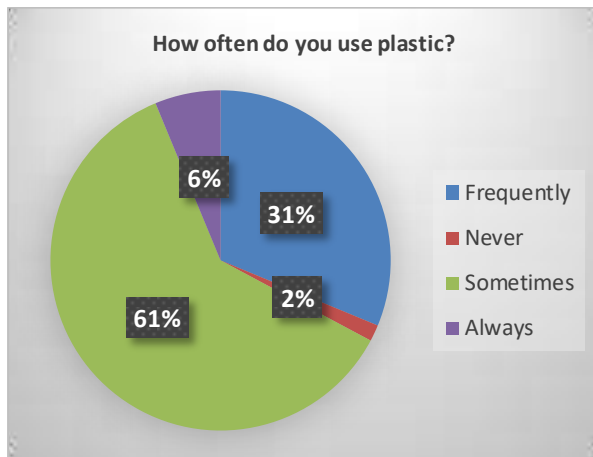


d

In the fourth chart(d), the environmentally friendly products such as energy saving electrical appliances were introduced.Environment friendly products reduces the climatic changes because around 29% of the greenhouse gas emission from the electrical sector. Almost more than a quadrant of population regularly uses eco-friendly products or devices whereas 36% of the population not regularly but sometimes try to purchase or use ecofriendly products. But almost half of the population frequently uses energy saving light bulbs.

In the fifth chart (e), how often plastic bags or plastic materials used was asked. More than half of the population sometimes uses plastic bags or any plastic items while shopping or while planting a small plant.only few people always uses plastic item which is not good. Only 2% of the population were strictly

avoided use of plastic, since plastic is not good for environment and which does not biodegradable easily, plastic is cheaper but it has many disadvantages.



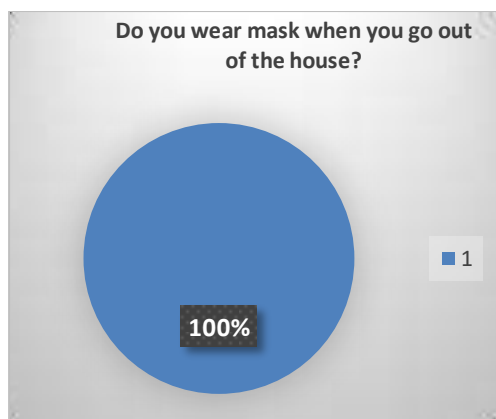
e

PART 3:

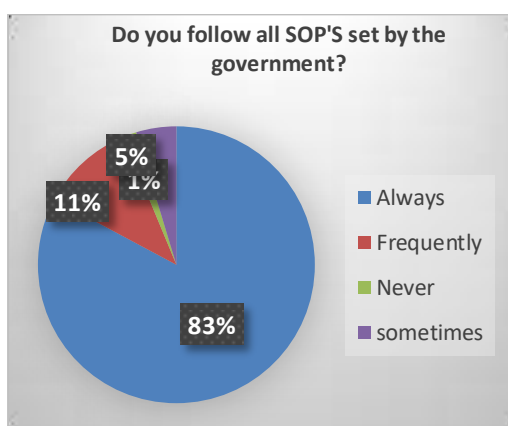
From the piechart (1) , almost everyone wears a mask to keep them self free from infections(virus), always wash hands with soap or with hand wash to keep yourself away from infection. Use N95 mask or cotton mask in which you feel comfortable.

In the second chart (2) , more than half of the population strictly following SOP'S or guideliness directed by state health administrator whereas only few people does not follow the guidelines and because of these cases are rising in the state. Always follow the guidelines given by the health officers , wear mask properly and don't remove your mask in thee public places.

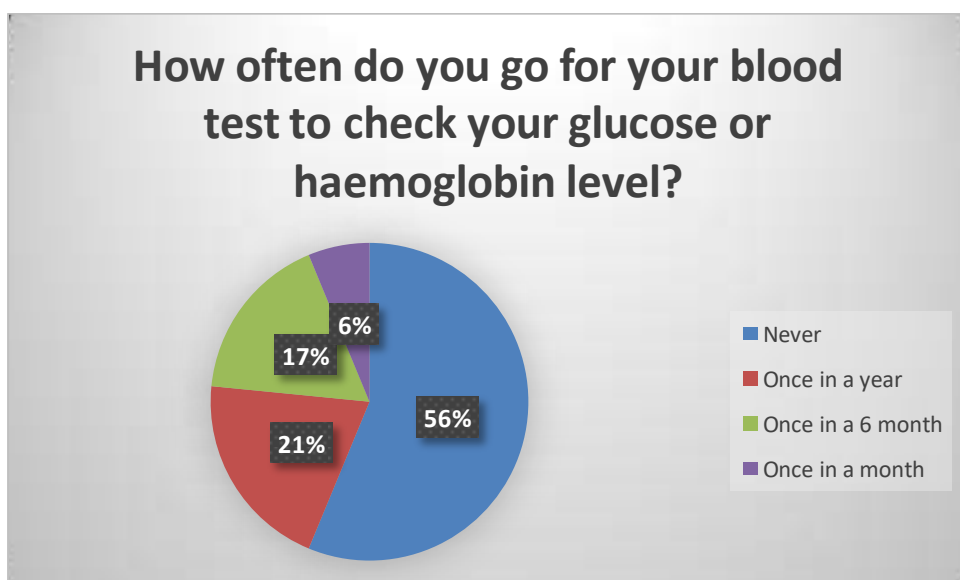
In the third chart(3), more than half of the population never test their bllod haemoglobin level while only few people regularly check their blood glucose level or haemoglobin once a month. One-fourth of the population do their test once a year while some people check their blood sugar level once in a 6 months.



1



2



3

Cleanliness survey is an annual survey of cleanliness , hygiene and sanitation in village and cities.

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2.7. Plantation.

Plants are really important for the planet and for all living things. Plants absorb carbon dioxide and release oxygen from their leaves, which humans and other animals need to breathe. Living things need plants to live - they eat them and live in them. Plants help to clean water too.

a plantation has been established, the work should not be considered finished. It will be necessary, for example, to protect the plantation against weather, fire, insects and fungi, and animals. A variety of cultural treatments also may be required to meet the purpose of the plantation. In general, planting coincides with the rainy season. After planting, use of opaque plastic films can impede evaporation and inhibit weed growth around potted stock. The spacings of the plantings should be wide enough to prevent competition for soil moisture, or when part of management, to accommodate machinery used for irrigation.

Plantation- a group of trees that have been planted together; such as ferns and conifers. The need for plantation has become even greater these days because of the growing pollution in the environment. There are a number of reasons why plantation is important for the environment. Everyone knows that trees are the natural sources of Oxygen as they inhale Carbon dioxide and exhale Oxygen and without it the survival of human beings is not possible on earth. They filter harmful pollutants from the atmosphere and provide us with fresher and cleaner air to breath. Air pollution can be controlled, if we plant more and more trees. They give us fruits and leaves that serve as food for birds, animals as well as human beings; moreover we get, wood, rubber and raw materials that are used for manufacturing miscellaneous goods such as furniture, doors and a lot more. Trees are habitats of birds and animals. They are maintaining biodiversity and ecological balance. If we really want to survive or lead a good life and also want to make a comfortable globe for upcoming generations, more and more trees must be planted. No one is focusing on plantation and not taking it seriously so the quote would really have some realistic modifications” Imagine if trees gave off WiFi signals, we would be planting so many trees and we would probably save the plant.” ,but unfortunately they only produce Oxygen we breath. it is said how we have grown as accustomed to technology that overlook the harmful impact it is having on our environment. The areas that are surrounded by trees, they are having a fresher and cleaner environment. On the other hand, industrial areas are having poor air quality due to the growing pollution.

We planted trees with full enthusiasm and full confidence that we are going to continue planting and taking care plants and tree throughout our life.

We planted shrubs,herbs, medicinal plants and some vegetables.

We planted Lemon grass,Mint, Green chilly,Carom(Ajwain), spring onion,Brinjal,Aloe Vera, Turmeric,Some flowers, Tomato, Coriander, Aconite (Rai),Curry leaves .





3. CONCLUSION.

Swacch Bharat Summer Internship was a learning experience for us. The internship was performed in Usgao village wherein we conducted awareness campaigns and waste collection drives. We learnt to work as a team. Everybody had an aim of cleanliness and spreading awareness about it amongst the people. We learnt about the Usgao garbage management system and the efforts that Panchayat is putting in to keep the village of Usgao garbage free. After a lot of hard work we finally completed our internship of 100 hours. We learnt to plan and execute our ideas. This internship in true sense is taking the Swachh Bharat Abhiyan to new heights. This type of internship is a great way to bring the people together and work towards a better India. Swachh Bharat Summer Internship should be conducted every year to build a clean and healthy India. For us, our Swacch Bharat Summer Internship Team, this internship is not the end but a beginning of something new wherein we will do our best in maintaining cleanliness in our surrounding.